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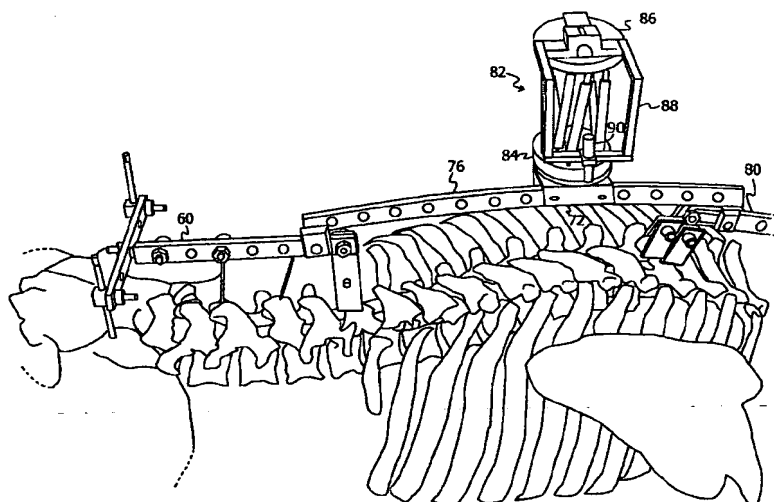
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(54) Title: APPARATUS FOR SPINAL FIXATION OF VERTEBRAE



(57) Abstract: A framed device in the form of a bridge for fixing a number of vertebrae together into positions which are uniquely defined relative to the bridge, but which can move with the spine relative to the external environment. The fixation generated by such a bridge is especially useful in Computer Assisted Surgery procedures, either using manual navigation and a tracking system to follow the position of the surgeon's tools relative to the operated vertebrae, or by using a pre-programmed robot mounted on the bridge itself to perform the surgery. Alternative embodiments of the bridge may be used either for performing surgery in one procedure on a number of vertebrae of the spine, or as a reference frame for performing surgery at different locations along the spine, while providing an alignment reference along major lengths or along all of the spine.